



Water Resources Division's Aquatic Invasive Species of the Week!

FOR THE WEEK OF:

November 11-17, 2013

Cylindro (A Blue-green Algae)

Cylindrospermopsis raciborskii

Special note: There are many species of blue-green algae- both native and non-native. Not all blue-green algae are considered harmful or an aquatic invasive species. Cylindro is considered an AIS and is listed on Michigan's Prohibited Species List.

Native Range: Tropical/Subtropical in origin. Cylindro is thought to have originated in South America.

Current Distribution: Cylindro was documented in low densities on Mona Lake (2002, 2003) and Muskegon Lake (2005) near Muskegon, Michigan. In 2001, there was a heavy bloom that occurred on Ball Lake, Indiana. Since then, Cylindro has been documented in several other lakes and reservoirs.

Means of Introduction: Ballast water is likely the initial path of introduction into the Great Lakes. Within basin spread can occur from migrating waterfowl, natural water flow of connected waterbodies, and recreational items such as trailers, boats, and bait buckets.

Description: Photosynthetic bacteria forming microscopic filaments known as trichomes that are solitary and straight and have tube-shaped cells. Filaments are not visible with the unaided eye and typically do not form surface blooms. Blooms may appear as green or yellowish 'foggy-looking' water just below the surface.

Impacts: This species of blue-green algae is capable of forming toxins and has shown harm in their native range but in Michigan has only occurred in low densities. When in bloom, blue-green algae can produce toxins that are harmful to human health. Some effects include: nausea, headache, liver damage, and dermatitis. Aquatic organisms are affected as well by fluctuations in available oxygen and the pH of the water. Water samples must be collected and analyzed to determine if harmful toxins are present.



Photo: Rolf Schauder, U of Frankfurt



Photo: Perdue University

For further reading on other harmful algae blooms, go to the DEQ's Water Words page:

<http://www.michigan.gov/deq/0,4561,7-135-3313-287910--,00.html>

For further information on Michigan's AIS Program:

www.michigan.gov/aquaticinvasives